000024717

REVISED

SCOPE OF WORK
REVISED POST-CLOSURE CARE PERMIT
MODIFICATION 2

Rocky Flats Plant

July 7, 1988

REVIEWED FOR CLASSIFICATION (U)

By J. A. Nesheim

Date 07-08-88

This scope of work consists of additional tasks to be added to the scope of work attached to Purchase Order Number - BA 21354PB, dated February 17, 1988. The above referenced Scope Of Work has had all sections applicable to this Scope Of Work reproduced below. Task 1 of the February 17, 1988 Scope Of Work has not been reproduced, nor have Tasks 2 and 3 of the April 8, 1988 Scope Of Work been reproduced.

SCOPE

This task is part of the RCRA closure activities being performed for the Rocky Flats Plant. This Scope Of Work (SOW) pertains to the revision of the Post-Closure Care Permit in accordance with comments recently received from the State of Colorado and the Environmental Protection Agency. Revisions will also be made to the Appendices of the Post-Closure Care Permit.

WORK DESCRIPTION

This task involves the complete revision of the Post-Closure Care Permit. This task will consolidate all the geologic, hydrogeologic, and analytical data available for units undergoing closure at the time of its writing. New data to be incorporated are primarily that which were generated from the 1986 and 1987 drilling and field activities, the ground water quality data accumulated over the past years, and data to be generated in 1988.

The Post-Closure Care Permit will apply only to those activities which will occur after closure of a unit. Therefore, any unit which is "clean closed" will not require inclusion in the Post-Closure Care Permit.

More specific comments on these activities can be found in the comments from the State of Colorado and the EPA concerning the Post-Closure Care Permit (attached).

TASK 1 - Submitted February 17, 1988

TASK 2 & TASK 3 - Submitted April 8, 1988

TASK 4 - Ground Water Monitoring

This task is part of the RCRA compliance activities being performed at the Rocky Flats Plant. This document should reflect all technical knowledge of the units requiring RCRA ground water monitoring. The CERCLA areas undergoing the RI/FS process will be summarized in terms of ground water findings and activities for those sites. Detailed discussions of the CERCLA areas will be found in the RI/FS documents for the CERCLA areas, some wells related to the CERCLA areas may be included in the regulated unit ground water monitoring plan.

These discussions will be presented in the Post-Closure Care Permit. No discussion of ground water and ground water monitoring will be

17

found in the RCRA Part B Permit Application because no land disposal units for RCRA hazardous waste are operated at the Rocky Flats Plant.

This task involves revision of the ground water monitoring section of the RCRA Post-Closure Care Permit. This task will consolidate all the geologic, hydrogeologic, and analytical data available for the Rocky Flats Plant, and for RCRA closure units in specific. Comments received from regulatory authorities should be considered in revision of this plan. "Regulated Units" refer to RCRA-Regulated Closure Units only. Specific subtasks that are part of Task 4 are:

- Discuss in detail what the "uppermost aquifer" is at the regulated units, and at the Rocky Flats Plant in general. The uppermost aquifer is the aquifer of most concern in ground water monitoring. The uppermost aquifer must be described with respect to quantity and quality of ground water.

- Draw ground water contour lines for the regulated units. These contour lines will extended to the most outlying wells and will be done on a quarterly basis. These will be done for each aquifer, if the aquifers are not interconnected.

- Identify all wells related to regulated units with respect to upgradient, downgradient, plume monitoring, or sidegradient wells. Also identify the monitoring requirements for all such wells.

- Identify any additional monitoring wells needed to properly monitor regulated units at the Rocky Flats plant. A schedule for completion of these actions will be developed by Rockwell based on man-hour estimates developed for this action.

- Identify what ground water flow regimes mean for the rate and extent of migration of contaminants, and for the location of contamination.

- Identify background ground water quality as possible, and discuss plans for additional background characterization. Baseline conditions of ground water quality and quantity will also be identified where possible.

- Identify the point of compliance and ground water protection standard for all regulated units. The ground water protection standard and guidelines should consider, and possibly include specific Safe Drinking Water Act (SDWA), Clean Water Act (CWA), RCRA, CERCLA and other applicable environmental laws and regulations as referenced in DOE Orders and Draft Orders.

- Address QA/QC concerns for ground water monitoring results. Identify criteria for rejection of data or determination of when lab or sampling contamination of a sample has occurred.

Justify all statements that any sample represented lab or sampling contamination. Data verification for outliers will be addressed to the extent possible.

- Present monitoring well and soil borehole logs; as well as well completion and well development summaries for all regulated units.

- Address bedrock ground water monitoring requirements and bedrock ground water quality at regulated units.

- Identify to the extent possible all areas in which CERCLA units have an impact on RCRA units, and conversely.

- Present a statistical analysis and discussion of data evaluation generated from routine ground water monitoring or a plan for conducting alternate statistical analyses from those presented in the RCRA regulations. This statistical discussion will be drafted by Rockwell International for inclusion in these documents. The monitoring network designed shall be based on statistical information and needs.

- All data supporting this ground water section will be attached to this section.

- Water level measurements will be reported for individual wells on the same table as pertinent field data. Similarly, total depth of the wells will be presented, and the media/structure in which the well was completed will also be presented.

- Monthly water level measurements should be compiled, presented, and analyzed to address concerns regarding spray irrigation effects on aquifers and contaminant migration.

- Present a long-term monitoring program for all regulated units that will require Post-Closure Care and Monitoring.

- Discuss the Corrective Action or Remedial Program(s) that will, or may, be implemented at any regulated unit or areas of contaminated ground water. Remedial actions for contaminated ground water should be addressed. This could include outlining a plan of action for determining appropriate actions. These actions should include decontaminating and decommissioning activities for the Rocky Flats Plant that are related to ground water.

- A summary and identification of areas that may be contaminated with hazardous substances and a strategy for monitoring and controlling the sources of these contaminants.

- The elements of the entire ground water monitoring program shall be specified (sampling plan, sampling, analysis, data management, and reporting), as shall the rationale or purpose

for selecting these elements. This program shall be designed to permit the early detection of ground water pollution or contamination.

- A reporting mechanism for detected ground water pollution or contamination shall be included.

- All data and figures will be digitized on a system compatible with the Rockwell International Autocad System.

TASK 5 - Post-Closure Care Permit

Revision of all sections of the Post-Closure Care Permit, Post-Closure Plan, and Exposure Information Report in response to the Notice Of Deficiency received from the Colorado Department of Health and the Environmental Protection Agency. This Task 5 will not include revisions to any Appendices of the Post-Closure Care Permit that are interim status Closure Plans.

TASK 6 - Revision of Interim Status Closure Plans For The Original Process Waste Lines (OPWL) and West Spray Field.

These Closure Plans will be revised in accordance with State and EPA comments, applicable closure guidance documents and previously unused data or newly generated data. The characterization of these sites will be updated as possible based upon the above information. Specific revisions necessary include geologic and hydrogeologic data, including cross sections as necessary to characterize the units. Specific discussions defining the Closure Performance Standard and those activities required to achieve the Closure Performance Standard must be included. These discussions will involve sampling and analysis plans identifying sampling locations and analyses to be conducted on collected samples. Rationale for selection of sampling locations and parameters for analysis is necessary. Detailed schedules for closure activities must be included with documentation to support those schedules. The preferred closure alternative will be detailed, scheduled, and costed.

Therefore, the activities for closure will be detailed and scheduled out; however, the points at which it may become necessary to pursue other closure options must be identified. Ground water monitoring data will be included from applicable monitoring wells in the closure plan as part of the characterization.

Specific subtasks that are part of Task 6 and the schedule are:

- Draft figures that will be included in the closure plans. These figures will include a detailed topographic map of the area (at a 1" = 100' scale), geologic cross-section(s) through the site, a figure depicting areas of contaminated soil at the site (if applicable), a figure depicting areas of proposed soil sampling, proposed ground water monitoring wells, maps of ground water flow and direction, and a figure identifying any plumes of contamination associated with the facility. Due by close of

business August 19, 1988.

- Discussions of the hydrogeologic relationship of the unit to the nearby ground water and surface water environment. To include discussions of contaminated soil areas, contaminated ground water areas, ground water flow directions, and the implications of these discussions for closure and long-term (post-closure) monitoring. To be included in August 19, 1988 Draft submission.

- A conceptual design of caps that may be required, with proposed grades and proposed soil specifications. To be included in the August 19, 1988 draft submission.

- A discussion in each closure plan, as a separate section identified in the Table of Contents, will address protection of human health and the environment.

- Plans and Specifications for the West Spray Field and Original Process Waste Lines will be identified, copied, and used in design of closure activities. These drawings may or may not be included in the closure plans submitted to the State and EPA. All Plans and Specifications will be copied by August 19, 1988, and this information included in the September 1, 1988 draft.

- The August 19, 1988 draft for Task 6 will include a table covering all units to be covered under the OPWL Closure Plan, with Rocky Flats numbering and Solid Waste Management Unit numbering both reproduced on a table along with building number, construction, type, age, volume, date of abandonment and method of abandonment, and drawing number on which abandonment or installation information can be found.

DELIVERABLES

The seller shall provide the necessary clerical, drafting, typing, copying and binding services for the reports. The final product will be bound in three ring binders for ease of future changes. Twenty five copies of the final report will be produced. Ten copies of drafts shall be produced for review purposes. Revisions to the draft reports will be made in accordance with Rockwell and DOE comments within the time periods allotted. Written progress reports which include a description of problems encountered and their resolution, or proposed resolution, plus plans for the next weeks activities shall be delivered to Rockwell weekly, due before close of business on Friday of each week.

The following are additional deliverable responsibilities:

1. A milestone chart shall be prepared and delivered to Rockwell. This milestone chart will be kept up to date by the subcontractor and submitted with the weekly progress reports.

2. Three sets of mylar reproducibles for all plates in the report will be delivered to Rockwell in the final submission.

e/7

3. A draft of this ground water document will be completed for Rockwell and DOE review by September 1, 1988. A draft of this document for Rockwell Review will be completed by August 12, 1988. This will pertain to the uppermost aquifer, including the bedrock water table, if appropriate.

4. By August 1, 1988 a review of additional wells required for regulated units, and man-hour estimates for installation, will be submitted to Rockwell International for review.

5. By August 1, 1988 a review of QA/QC concerns, including criteria for data rejection, determinations of lab or sample contamination, and data verification procedures for outliers.

6. Water level contour lines, on a quarterly basis, for regulated units and the Rocky Flats Plant in general will be completed by August 1, 1988 for submittal to Rockwell International.

7. The schedule for Tasks 5 and 6 will include a draft submission for Rockwell review on August 19, 1988. A draft will be completed for Rockwell and DOE review on September 1, 1988.

PERFORMANCE PERIOD

A project kickoff meeting will be held within 2 days of contract award. During the time period this project Rockwell personnel will be informed of problems and will oversee progress of this report.

- Eight copies of the documents for Tasks 4, 5, and 6 will be available by close of business September 29, 1988 for submission to the Colorado Department of Health and the EPA.

- An additional 22 copies of the documents for Tasks 4, 5, and 6 will be delivered to Rockwell on October 7, 1988 for internal distribution.

17